

### **Amendments to the Claims:**

This listing of claims replaces all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1-21. (Cancelled).

22. (Previously Presented) An Electronic Support Measures system for detecting and identifying radar signals present in an area, comprising:

a plurality of antenna sets for receiving the radar signals, each antenna set including at least one antenna and each set covering a sector of the surrounding area;

a plurality of receiver front ends, each receiver front end being connected to an antenna set covering a specific sector;

a plurality of first band-pass filters connected to a first antenna set, said band-pass filters splitting the signals received from the first antenna set into a number of first sub-bands;

a plurality of first low noise preamplifiers, each connected with its input to a first band-pass filter and the output connected to one of a corresponding number of first mixers, said mixers being adapted to convert a first sub-band into an Intermediate Frequency (1<sup>st</sup> IF), the output from each first mixer being fed to a second band-pass filter tuned to the frequency of said Intermediate Frequency, an output of said second band-pass filters being connected to a first adder, said adder being adapted to combine the signals from the second band-pass filters into a common Intermediate Frequency channel;

a plurality of receiver second stages, each connected to a receiver front end and receiving said common intermediate frequency channel, said intermediate frequency channel being fed to a number of third band-pass filters in order to split said common intermediate frequency channel into a number of second sub-bands, the output of each third band-pass filter being fed to a second amplifier, the output of the second amplifier being fed to a second mixer, said second mixer being adapted to convert said intermediate frequency channel into baseband, the output of the second mixer being fed

to a fourth band-pass filter, the outputs of all fourth band-pass filters being fed to a second adder, said second adder being adapted to combine the signals received from the fourth band-pass filters into a common baseband channel; and,

an Analog-to-Digital converter connected to said second adder and being adapted to digitize the signals received from said second adder, a signal processing unit receiving the signal from the Analog-to-Digital converter.

23. (Previously Presented) The system recited in claim 22, further comprising a plurality of first detectors, each with an input connected to the output of said second band-pass filters, an output of each first detector being connected to an input of a comparator, a control logic connected to said first comparator, said logic being adapted to identify on which antenna a given signal is received.

24. (Previously Presented) The system recited in claim 23, wherein each first low noise preamplifier and each second amplifier are equipped with an enable/disable input, said enable/disable input being connected to said control logic, said control logic being adapted to enable the operation of selected amplifiers and disable other amplifiers, in order to save power.

25. (Previously Presented) The system recited in claim 22, wherein said system includes a total of 12 antennas, of which two antennas point in each direction, one of said two antennas covering the range of 2 - 6 GHz and the other covering the range of 6 - 18 GHz.

26. (Previously Presented) The system recited in claim 22, further comprising:

a network connecting a plurality of such Electronic Support Measures systems to a control centre, said control centre including a database of known radar emitter signal signatures, wherein said control centre is operative to 1) receive direction and signature information of received radar signals from said plurality of Electronic Support Measures

systems, 2) determine the position of a radar emitter by triangulation, and 3) determine the identity of said radar emitter by comparison with emitter signatures stored in said database.

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